

WHAT IS CLAIMED IS:

1. ~~A method of controlling a data reader, the method comprising the steps of:~~

illuminating an object located in front of a window with light from a light source;

detecting an amount of light from the light source that has been reflected by the object;

determining whether an object is present or absent from in front of the window by comparing the amount of light detected in the detecting step to an amount of light expected when an object is present in front of the window; and

initiating a data reader control function in response to a determination made in the determining step.

2. The method of claim 1, wherein, the data reader control function is initiated in the initiating step when it is determined, in the determining step, that an object is present in front of the window.

3. The method of claim 1, wherein, the data reader control function is initiated in the initiating step when it is determined, in the determining step, that an object is absent from in front of the window.

4. The method of claim 1, wherein, in the determining step, the determination that the object is present in front of the window is made only when the object is present in an immediate vicinity of the window.

5. The method of claim 4, wherein the control function comprises a volume control function.

6. The method of claim 4, wherein the control function comprises a wake-up function.

7. The method of claim 1, wherein, in the determining step, the determination that the object is present in front of the window is made only when the object is present in a general vicinity of the window.

8. The method of claim 7, wherein the control function comprises a wake-up function.

9. The method of claim 1, wherein, in the determining step, a first determination is made when the object is present in an immediate vicinity of the window, and a second determination is made when the object is present in a general vicinity of the window, and

wherein, in the initiating step, a first data reader control function is initiated when the first determination is made in the determining step, and a second data reader control function is initiated when the second determination is made in the determining step.

10. The method of claim 9, wherein the first control function comprises a volume control function, and the second control function comprises a wake-up function.

~~11. A method of controlling a data reader having a window,
the method comprising the steps of:~~

~~illuminating the window with light from a light
source;~~

~~detecting an amount of light from the light source
that has been reflected by the window;~~

~~determining whether the window is present by comparing
the amount of light detected in the detecting step to an
amount of light expected when a window is present; and~~

~~disabling the data reader if it determined, in the
determining step, that the window is not present.~~

12. The method of claim 11, wherein the data reader
includes a laser, and the step of disabling the data reader
comprises the step of turning the laser off.

13. An apparatus comprising:

a window having a first region;

a light source positioned behind the window, aimed to
illuminate an object located in front of the window;

a first light detector positioned behind the window,
aimed to detect light from the light source that has been
reflected by the object;

a first comparator that compares an amount of light
detected by the first light detector to a first threshold,
and asserts a first output when the amount of light
detected by the first light detector exceeds a first
threshold; and

an optical data reader having a second light detector,
the second light detector positioned behind the window and

~~aimed to detect light arriving from objects located in front of the window, wherein the optical data reader is controlled by an assertion of the first output.~~

14. The apparatus of claim 13, wherein the amount of light detected by the first light detector exceeds the first threshold when an object is present in front of the window in an immediate vicinity of the first region of the window.

15. The apparatus of claim 14, wherein the optical data reader adjusts a volume in response to the assertion of the first output.

16. The apparatus of claim 14, wherein the optical data reader initiates a wake-up function in response to the assertion of the first output.

17. The apparatus of claim 14, wherein the optical data reader is controlled by the assertion of the first output when the assertion of the first output continues for at least one second.

18. The apparatus of claim 13, wherein the amount of light detected by the first light detector exceeds the first threshold when an object is present in front of the window in a general vicinity of the window.

19. The apparatus of claim 18, wherein the optical data reader initiates a wake-up function in response to the assertion of the first output.

20. The apparatus of claim 13, wherein the amount of light detected by the first light detector exceeds the first threshold when the window is installed in front of the light source and the first light detector, and

wherein the optical data reader is disabled when the first output is not asserted.

21. The apparatus of claim 20, wherein the optical data reader comprises a laser, and the laser is turned off when the optical data reader is disabled.

22. The apparatus of claim 13, further comprising a second comparator that compares the amount of light detected by the first light detector to a second threshold, and asserts a second output when the amount of light detected by the first light detector exceeds a second threshold, and

wherein the optical data reader is controlled by an assertion of the second output.

23. The apparatus of claim 22, wherein the amount of light detected by the first light detector exceeds the first threshold when an object is present in front of the window in an immediate vicinity of the first region of the window, and the amount of light detected by the first light detector exceeds the second threshold when an object is present in front of the window in a general vicinity of the window.

~~24. The apparatus of claim 23, wherein the optical data reader adjusts a volume in response to the assertion of the first output, and initiates a wake-up function in response to the assertion of the second output.~~

25. The apparatus of claim 13, further comprising:

a second comparator that compares the amount of light detected by the first light detector to a second threshold, and asserts a second output when the amount of light detected by the first light detector exceeds a second threshold; and

a third comparator that compares the amount of light detected by the first light detector to a third threshold, and asserts a third output when the amount of light detected by the first light detector exceeds a third threshold,

wherein the optical data reader is controlled by an assertion of the first output, and the optical data reader is controlled by an assertion of the second output.

26. The apparatus of claim 25, wherein the amount of light detected by the first light detector exceeds the first threshold when an object is present in front of the window in an immediate vicinity of the first region of the window, the amount of light detected by the first light detector exceeds the second threshold when an object is present in front of the window in a general vicinity of the window, and the amount of light detected by the first light detector exceeds the third threshold when the window is properly installed in the apparatus.

27. ~~The apparatus of claim 26, wherein the optical data reader adjusts a volume in response to the assertion of the first output, wherein the optical data reader initiates a wake-up function in response to the assertion of the second output, and wherein the optical data reader is disabled when the third output is not asserted.~~

28. The apparatus of claim 13, wherein a single light detector serves as both the first light detector and the second light detector.

29. The apparatus of claim 13, wherein the first light detector and the second light detector are not the same detector.

30. The apparatus of claim 13, wherein the light source includes a modulator that modulates the light generated by the light source, and wherein the light detector includes a discriminator that detects the modulated light and rejects non-modulated light.

31. The apparatus of claim 30, wherein the discriminator comprises a bandpass filter.

32. The apparatus of claim 30, wherein the discriminator comprises a demodulator.

33. The apparatus of claim 30, wherein the modulator comprises a switch that switches the light source on and

off, and the discriminator comprises a subtractor that subtracts a light measurement made when the switch is off from a light measurement made when the switch is on.

34. The apparatus of claim 13, further comprising an optical data receiver that, when a wireless optical data transmission arrives at the light detector from a remote device, monitors the output signal generated by the light detector and extracts data contained in the data transmission from the output signal, wherein the extracted data is provided to the optical reader.

35. The apparatus of claim 34, wherein the optical reader uses the extracted data to configure or to reprogram the optical reader.

36. The apparatus of claim 34, further comprising an optical data transmitter that transmits data from the optical reader to the remote device by modulating the light generated by the light source based on the data being transmitted.

37. The apparatus of claim 13, wherein the optical reader comprises a barcode reader.

38. The apparatus of claim 13, wherein the optical reader comprises a flying-spot laser barcode reader.